

DOCUMENT RESUME

ED 222 313

RC 013 630

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TITLE Assessments of Community Attributes: The Influence of Size of Place and Ecological Milieu.
PUB DATE Sep 82
NOTE 24p.; Paper presented at the Annual Meeting of the Rural Sociological Society (San Francisco, CA, September 1-4, 1982).
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Age; *Community Characteristics; Community Satisfaction; Community Services; Cultural Activities; Differences; Economic Development; Educational Attainment; Family Income; Geographic Location; Health Services; Housing; *Individual Characteristics; Participant Satisfaction; *Place of Residence; *Proximity; Public Schools; *Quality of Life; Recreation; Research Methodology; *Rural Population; School Size; Sex; Social Environment; State Surveys
IDENTIFIERS *Florida

ABSTRACT

A 1978 statewide survey of Florida's licensed drivers 18 years or older was used to ascertain: (1) if significant differences in assessment of 23 community attributes exist by size of place and ecological milieu (community location relative to a metropolitan core county) and (2) if these differences persist when personal characteristics of residents (age, income, race, sex, education) were introduced as controls. Communities were classified by three locational groupings and differentiated by size. The study was limited to 3,564 persons residing in places of under 50,000 people. Findings associated with the 23 community attributes were presented by 7 broad topical areas: public facilities and services, health, housing, social/environmental concerns, recreation and cultural opportunities, economic development, and government-citizen relations. Although some modifications were apparent, the statistically significant relationships for the assessment were generally the same when personal characteristics were used as a control. Additionally, findings demonstrate continued use of a single residency classification for carrying out research on subjective assessments of quality of life attributes is inadequate. Size of place and ecological milieu should be considered simultaneously given that both account for a significant amount of the variation in residents' appraisals of adequacy of local attributes, even when important characteristics of residents are controlled. (AH)

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ASSESSMENTS OF COMMUNITY ATTRIBUTES: THE
INFLUENCE OF SIZE OF PLACE AND ECOLOGICAL MILIEU

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RC 01 3630

Paper presented at the 1982 Annual Meeting of the Rural Sociological Society,
San Francisco, California; September 1-4.

ASSESSMENTS OF COMMUNITY ATTRIBUTES: THE
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INTRODUCTION

Examination of quality of life attributes associated with different residential places has proceeded along two distinct lines. The first has focused on objective indicators of well-being available on communities. These works have tended to uncover two important trends: (1) that superior institutional services (i.e., fire protection, health care, housing) are more readily available in urban than in rural localities; and (2) that social and environmental conditions (i.e., less crime, better air and water) are of higher quality in rural communities when compared to urban centers (Dillman and Tremblay, 1977; Hines, et al., 1975).

The second approach has explored the development of indices for subjectively assessing life quality in communities. As Marans and Rodgers (1975:302) have noted, "subjective indicators [were] needed to supplement objective indicators for the obvious, but often overlooked, reason that an individual's satisfaction with any set of circumstances is dependent, not only on those circumstances as reviewed objectively, but on a whole set of values, attitudes and expectations that he brings into the situation." Components of the general quality of life concept that have emerged as important subjective indicators in recent years are community satisfaction and adequacy of local services (see, for example, Campbell, et al.,

1976; Rojek, et al., 1975; Christenson, 1976).^{1/}

In their early work on community satisfaction, Johnson and Knop (1970) found that satisfaction with shopping facilities, medical care, employment opportunities and entertainment-recreational activities was highest among urban residents. At the same time, rural people registered greater satisfaction with local democratic processes and the natural beauty of their area. A subsequent study by Elgin, et al (1974) reinforced the Johnson and Knop work by noting the positive influence of air quality and accessibility to governmental decision makers on the overall satisfaction ratings of small town-rural residents. Rojek, et al (1975) uncovered a significant relationship between place of residence and satisfaction with medical (hospital-medical facilities, doctors, dentists) and commercial services (job opportunities, shopping and recreational facilities), but not with public service (streets/roads, fire protection, water supply, police protection) and educational satisfaction (primary and secondary schools). In one of the more encompassing works on community satisfaction, Marans and Rodgers (1975) reported that size of place was related to residents' evaluations of various community attributes which, in turn, influenced overall community satisfaction.

Assimilating the findings of several statewide studies^{2/}, Dillman and Tremblay (1977:127) found that overall community satisfaction was higher among rural people, even though access to various services was rated higher by those in urban localities. The authors suggested that the primary importance placed on nonservice amenities (such as friendliness of residents, open spaces, place to raise children) by rural residents con-

tributed significantly to their overall ratings. In a related study, Miller and Crader (1979) showed that rural people had higher levels of interpersonal satisfaction, while urban residents registered greater satisfaction with the economic aspects of their communities.

Focusing specifically on community services, Christenson (1976) reported that availability and quality of local services were significantly linked to population density. Perceived adequacy of five community services by place of residence was examined by Warner and Burdge (1979). Employing two district residency classifications (large metro, small metro, nonmetro; and farm, open country-small town, town-city, large city), they found that place of residence was consistently related to subjective assessments of local services. Nonmetro and open country-small town residents were the most inclined to judge the five services as inadequate.

The subjective studies presented above provide empirical evidence of the differential assessments of community quality of life attributes by place of residence. A serious shortcoming associated with this body of literature, however, is the limited attention devoted to the simultaneous influence of size of place and ecological positioning on community attribute ratings. For the most part, evaluations of local amenities have been conducted by either size of place (i.e., Rojek, et al, 1975; Johnson and Knop, 1970) or ecological location vis-a-vis a metropolitan area (i.e., Warner and Burdge, 1979; Dillman, et al, undated), but not by both residency groupings.^{3/} The purpose of this paper, therefore, is to begin exploration of this important line of research. Specifically, the paper will address the following critical questions: Do significant differences in the assessment of community attributes exist by the size and ecological

positioning of places? If so, do these differences persist when personal characteristics of residents are introduced as controls?

RESEARCH PROCEDURES

Data were collected in a statewide mail questionnaire survey conducted in Florida during the spring of 1978.^{4/} A proportional sample of 11,041 was selected from a statewide list of licensed drivers 18 years of age or older. To maximize its representativeness, the sample was stratified on the basis of county, age and sex. Of the total sample, 2,549 persons were deleted since they were deceased, relocated to another state, moved without leaving a forwarding address, or were physically incapacitated. The reachable sample was therefore reduced to 8,492, of which 5,926 persons returned usable questionnaires (69.8 percent response rate).^{5/}

One major portion of the 12 page questionnaire focused on respondents' assessments of several community attributes. Persons were asked to indicate their views regarding the severity of various problems in their community. Response categories and associated weights were "no problem" = 1, "small problem" = 2, "medium problem" = 3, and "serious problem" = 4.

The ecological milieu variable was defined on the basis of a community's location relative to a metropolitan core county. Employing adaptations of U.S. Bureau of Census definitions,^{6/} communities were classified into one of three locational groupings: (1) in a metropolitan core county; (2) in a county adjacent to a metro core county; (3) in a nonmetro county, not adjacent to a metro core county. Communities were also differentiated on the basis of size: (1) in or near a town of under 2,500

people; (2) in a town/city of 2,500 to 9,999 persons; and (3) in a city of 10,000 to 49,999 persons. Persons residing in cities of 50,000-plus population were not included in our study since their inclusion would have precluded the use of all three ecological location groupings in the examination of community attribute ratings. Consequently, our study was limited to the 3,564 persons residing in places of under 50,000 people.

The distribution of our sample on the ecological variable was as follows: metro core, 57.7 percent; adjacent, 30.6 percent, and non-adjacent, 11.7 percent. As for the size of place, 40.5 percent of the respondents resided in or near towns of 2,500 people, 24.4 percent in cities or towns of 2,500 to 9,999 persons, and 35.1 percent in cities of 10,000 to 49,999 residents.

ANALYSIS AND FINDINGS

In order to determine the influence of community size and ecological milieu on subjective assessments of community attributes, a two-way factorial design for unbalanced cell frequencies was utilized. Mean-attribute ratings of respondents by the two factors are summarized in Table 1. Associated with each attribute is a F-ratio, which indicates how well the model as a whole accounts for the ratings on the dependent variable. Significant differences in assessments are found for 19 of the 23 attributes, providing initial evidence that residents' perceptions of the adequacy of these attributes do differ (in most cases) by size of place and ecological positioning.

[Table 1 about here]

A more direct examination of the effects of both factors (size of

place, ecological milieu) on attribute assessments is presented in Table 2. It decomposes the sums of squares into three parts: effects due to size of place (A), ecological milieu (B), and the interaction of both community size and ecological location (AB). Partitioning is carried out according to the classic regression approach (Kim, et al., 1975), which measures the effect of a given variable after adjusting for all other effects. For example, the 7.02 sum of squares value for the "upkeep of roads" attribute signifies the effect of size of place after the sums of squares due to ecological milieu and the interaction between the two factors have been accounted for.

To facilitate our discussion, findings associated with the 23 attributes will be presented by eight broad topical areas.

Public Facilities and Services (attributes 1 thru 6): Table 2 shows that the main effects of size of place are more powerful for two dependent variables - police and fire protection - though the main effect of ecological location is also statistically significant in predicting respondents' ratings for fire protection. Ecological milieu has more of an effect on upkeep of roads and public library services. Two-way interactions reach significance levels for fire and police protection. Of interest is the finding that neither size of place nor ecological milieu are significant in predicting respondents' perceptions of the adequacy of primary or secondary schools (attributes 5 and 6).

Health (attributes 7, 8 and 9): The main effect of community size is more substantial in explaining variation in the rating of emergency ambulance service than is ecological milieu. Assessments of health care facilities/

services and availability of doctors, however, is more closely tied to the ecological location of the individuals' place of residence. Only for the availability of doctors attribute is a statistically significant interaction uncovered.

[Table 2 about here]

Housing (attributes 10 and 11): Perceptions of the adequacy of houses and apartments to rent are significantly affected by size of place, ecological positioning, and interaction between the factors. Nonetheless, it is ecological milieu that emerges as the most significant factor. No statistically significant effects are found for low cost housing.

Social/Environmental Concerns (attributes 12 thru 15): Surprisingly, the main effects associated with size of place are non-significant for all four attributes associated with social/environmental concerns. It is ecological milieu that proves to be the most influential (at least for three of the four dependent variables). For both water pollution and crime, the two-way interactions involving size of place and ecological milieu are statistically significant.

Recreation and Cultural Opportunities (attributes 16 thru 19): Findings displayed in Table 2 indicate that sums of squares uniquely due to ecological location and community size are highly significant for all four attributes, with main effects of ecological milieu being the more powerful of the two. Interaction effects reach statistical significance for cultural opportunities, recreational opportunities for adults and for senior citizens.

Economic Development (attributes 20 and 21): Both community size and ecological positioning have significant effects on the perceived adequacy of job opportunities for youth and the availability of shopping facilities, with the latter factor being the more sizable of the two main effects. The interaction effect, over and beyond the separate effects of size of place and ecological milieu, is highly significant for the shopping facilities attribute.

Government-Citizen Relations (attributes 22 and 23): No statistically significant main or interactive effects are detected for ratings on the two dependent variables (attention to complaints about government, citizen participation in community decision making) associated with government-citizen relations.

The discussion above provides some support for the notion that community attribute ratings are influenced by both size of place and ecological milieu. The next critical issue, therefore, is whether these differences will persist once key personal characteristics of respondents are introduced as controls. Several studies have suggested that variables such as sex, age, race, income, and education could significantly affect persons' community satisfaction levels and perceptions of local attributes (see, for example, Miller and Crader, 1979; Rojek, et al., 1975; Marans and Rodgers, 1975; Warner and Burdge, 1979). Table 3 reports the strength of the main effects and interaction term on attribute assessments after variations due to five covariates (sex, race, age, family income, education) have been removed.^{1/}

[Table 3 about here]

In general, the statistically significant relationships reported in Table 2 remain significant in Table 3. Nonetheless, some modifications are apparent. Whereas the sum of squares due to size of place proves non-significant for predicting respondents' ratings of the crime problem in Table 2, it does reach the .05 level of significance when personal characteristics are entered as controls. In addition, the main effect of ecological milieu in Table 3 becomes significant for the elementary school attribute, but loses statistical significance for the emergency ambulance service variable. Although two-way interaction effects for fire protection and water pollution are significant in Table 2, they prove to be non-significant in Table 3. Lastly, a significant interaction effect is uncovered for elementary school when variations due to the five covariates are removed from this dependent variable.

DISCUSSION

Researchers have generally relied on one of two residency classifications for studying residents' perceptions of the adequacy of local attributes. For some, the focus has been on community size, while for others, the ecological position of a county (in which a given community is located) relative to a metropolitan area. Our study extends past research by simultaneously addressing the effects of size of place and ecological milieu on community attribute assessments.

The importance of treating both residency groupings is captured in Table 4. Rankings are assigned to each of the three components (size of place, ecological milieu, interaction term) based upon the strength of their effects (as shown in Table 3) on each of the 23 dependent variables.

For example, ecological milieu is assigned a value of "1" for upkeep of roads and streets because it emerges as the most important residential classification when predicting ratings on this variable. Size of place is of secondary importance, so it receives a ranking of "2". The interaction is assigned a "ns" designation since it has no statistically significant effect on the dependent variable.

[Table 4 about here]

As Table 4 reports, size of place has more powerful effects on three public service ratings: police protection, fire protection and emergency ambulance service. The main effect of ecological milieu is more substantial in explaining variation associated with 15 community attributes. The interaction term proves significant for nine local attributes. Neither factor is instrumental for assessments of junior and senior high schools, low cost housing, police-community relations, attention to complaints about government, and citizen participation in community decision making.

Our findings demonstrate that the continued use of a single residency classification for carrying out research on subjective assessments of community quality of life attributes is inadequate. Size of place and ecological milieu should be considered simultaneously given that both account for a significant amount of variation in residents' appraisals of the adequacy of local attributes, even when important characteristics of residents are controlled.

FOOTNOTES

- 1/ Another relevant body of knowledge that has developed in recent years, but which is not treated in this paper, is the locational preference literature. One important theme of this research has been the identification of attributes deemed important in one's preferred community (see, for example, Blake, et al, 1975; Dillman and Dobash, 1972; Blackwood and Carpenter, 1978).
- 2/ Studies referenced by Dillman and Tremblay (1977) include Williams, et al (1975), Christenson (1974, 1976).
- 3/ While Warner and Burdge (1979) employ both residency classifications in their study, the groupings are not treated simultaneously in their data analyses.
- 4/ Details of the methodology utilized for our mail questionnaire survey are described by Dillman (1978) in his work on the Total Design Method.
- 5/ The 5,926 respondents were found to compare quite favorably with 1978 Florida population estimates available on age, sex and race.
- 6/ We defined a metropolitan core county as one in which a central city or twin cities of 50,000 or more inhabitants is located. Adjacent counties were identified as counties contiguous to a metro core county, regardless of whether or not they were part of an SMSA. Non-adjacent counties were described as nonmetro counties at least one county removed from any metro core county.

7/ The five variables were coded as follows: Sex - (1) Male, (2) Female; Race - (1) White, (2) Non-White; Age - coded in actual years; Family Income - (1) under 5,000, (2) 5,000-6,999, (3) 7,000-8,999, (4) 9,000-11,999, (5) 12,000-14,999, (6) 15,000-19,999, (7) 20,000-24,999, (8) 25,000-49,999, (9) 50,000+; Education - (1) never went to school, (2) some grade school, (3) completed 8th grade, (4) some high school, (5) completed high school or equivalent, (6) some college or vocational school, (7) completed 4 year college, (8) graduate or professional school.

Table 1. Mean Score Ratings of Attributes by Size of Place and Ecological Milieu ^{a/}

Attributes	Less than 2,500			2,500 to 9,999			10,000 to 49,999			F-value
	Metro	Adj.	Non-Adj.	Metro	Adj.	Non-Adj.	Metro	Adj.	Non-Adj.	
1. Upkeep of Roads and Streets.....	2.78	2.87	2.78	2.54	2.88	2.60	2.61	2.77	2.84	6.48***
2. Police Protection.....	2.27	2.12	2.18	1.93	1.99	2.26	1.98	2.03	2.07	5.77***
3. Fire Protection.....	2.11	2.32	2.59	1.78	2.03	1.90	1.71	1.79	1.95	34.01***
4. Public Library System.....	1.71	2.08	1.86	1.62	1.90	1.66	1.61	1.74	1.75	13.13***
5. Elementary School.....	2.21	1.98	2.23	2.02	2.02	2.07	2.26	2.17	2.00	4.62***
6. Junior and Senior High Schools.....	2.62	2.46	2.65	2.55	2.53	2.56	2.65	2.57	2.43	1.72
7. Emergency Ambulance Service.....	1.93	1.97	2.13	1.70	1.76	1.81	1.63	1.76	1.70	11.83***
8. Health Care Facilities/Services.....	2.25	2.41	2.64	2.22	2.45	2.60	2.14	2.27	2.32	9.24***
9. Availability of Doctors.....	2.26	2.72	3.00	2.26	2.64	2.87	2.11	2.28	2.43	31.12***
10. Houses/Apartments to Rent.....	2.27	2.60	2.77	2.24	2.69	3.00	2.15	2.50	2.16	20.80***
11. Low Cost Housing.....	2.76	2.76	2.84	2.77	2.88	2.79	2.86	2.89	2.85	.88
12. Teenage Drug Abuse.....	3.21	2.98	3.03	3.13	3.02	3.14	3.14	3.06	3.09	3.03**
13. Water Pollution.....	2.48	2.01	2.10	2.43	2.26	2.03	2.50	2.20	2.29	14.46***
14. Crime.....	3.01	2.51	2.61	2.75	2.57	2.71	2.95	2.76	2.73	18.58***
15. Police-Community Relations.....	2.12	2.08	2.12	1.92	2.03	2.14	1.99	1.97	2.11	2.08*
16. Youth Recreation Opportunities.....	2.49	2.79	2.96	2.43	2.81	2.88	2.35	2.50	2.44	15.51***
17. Cultural Opportunities.....	2.32	2.88	3.10	2.30	2.93	3.00	2.18	2.42	2.74	38.45***
18. Recreation Opportunities for Adults.	2.33	2.65	2.86	2.20	2.85	2.87	2.13	2.29	2.21	27.55***
19. Recreation for Senior Citizens.....	2.16	2.50	2.67	2.03	2.54	2.83	1.97	2.07	2.15	26.25***
20. Job Opportunities for Youth.....	2.97	3.18	3.30	3.04	3.29	3.38	2.95	3.09	3.13	8.64***
21. Shopping Facilities.....	1.63	2.24	2.51	1.55	2.08	2.60	1.40	1.53	1.81	74.94***
22. Attention to Complaints about Gov't.	2.60	2.53	2.62	2.50	2.53	2.74	2.57	2.60	2.71	.94
23. Citizen Participation.....	2.62	2.51	2.54	2.48	2.62	2.52	2.61	2.63	2.56	1.27

a/ Number of cases associated with each of the nine groupings differed from one to the next. The range of cases were as follows:

*P < .05	less than 2,500	2,500 to 9,999:	10,000 to 49,999:
**P < .01	Metro (504-558)	Metro (453-498)	Metro (888-987)
***P < .001	Adj. (554-596)	Adj. (254-270)	Adj. (177-195)
	Non-Adj. (249-261)	Non-Adj. (81-88)	Non-Adj. (51-56)

Table 2. Two-Way Analysis of Variance for the Prediction of Ratings on 23 Community Attributes.

Attributes	Size of Place (A)		Ecological Mixieu (B)		Interaction (AB)		n
	Sums of Squares	F	Sums of Squares	F	Sums of Squares	F	
1. Upkeep of Roads and Streets.....	7.27	3.53*	22.30	10.82***	9.29	2.25	3488
2. Police Protection.....	11.09	5.14**	3.17	1.47	12.70	2.95*	3466
3. Fire Protection.....	119.88	59.14***	30.92	15.26***	11.40	2.81*	3489
4. Public Library System.....	14.50	7.50***	38.84	20.10***	6.65	1.72	3449
5. Elementary School.....	3.68	1.63	6.02	2.66	9.95	2.20	3215
6. Junior and Senior High Schools.....	.49	.21	4.29	1.80	5.35	1.12	3256
7. Emergency Ambulance Service.....	41.11	22.10***	5.62	3.02	2.47	.66	3461
8. Health Care Facilities/Services.....	10.49	4.96**	33.42	15.81***	2.66	.63	3437
9. Availability of Doctors.....	43.95	18.29***	117.47	48.90***	13.55	2.82*	3489
10. Houses/Apartments to Rent.....	32.66	13.76***	104.26	43.93***	18.35	3.87*	3425
11. Low Cost Housing.....	1.81	.75	1.50	.62	2.07	.43	3391
12. Teenage Drug Abuse.....	.21	.13	11.02	6.73***	3.96	1.21	3336
13. Water Pollution.....	5.17	2.22	71.99	30.92***	11.51	2.47*	3462
14. Crime.....	4.38	2.72	51.71	32.07***	18.20	5.65***	3436
15. Police-Community Relations.....	3.06	1.53	2.93	1.46	3.92	.98	3392
16. Youth Recreation Opportunities.....	28.94	11.86***	59.07	24.21***	9.75	2.00	3382
17. Cultural Opportunities.....	29.95	11.89***	198.02	78.62***	15.84	3.15*	3428
18. Recreation Opportunities for Adults.....	51.83	21.90***	104.77	44.27***	29.94	5.32***	3447
19. Recreation for Senior Citizens.....	46.10	19.82***	96.02	41.29***	21.83	4.69**	3423
20. Job Opportunities for Youth.....	6.79	3.84*	34.70	19.61***	1.79	.51	3352
21. Shopping Facilities.....	85.83	47.71***	207.07	115.10***	34.26	9.52***	3474
22. Attention to Complaints about Government.....	.52	.25	3.89	1.87	2.98	.71	3316
23. Citizen Participation.....	.87	.42	.53	.25	6.77	1.62	3349

*P < .05
**P < .01
***P < .001

Table 1. Two-Way Analysis of Variance for the Prediction of Ratings on 23 Community Attributes, Controlling for Personal Characteristics of Residents.

Attributes	Size of Place (A)		Ecological Milieu (B)		Interaction (AB)		n
	Sums of Squares	F	Sums of Squares	F	Sums of Squares	F	
1. Upkeep of Roads and Streets.....	7.47	3.72*	15.19	7.56***	5.36	1.34	3132
2. Police Protection.....	6.33	3.05*	.69	.34	11.05	2.67*	3111
3. Fire Protection.....	108.18	54.67***	23.94	12.10***	8.70	2.20	3136
4. Public Library System.....	12.92	6.84***	40.45	21.42***	5.56	1.47	3100
5. Elementary School.....	2.77	1.24	7.85	3.52*	10.69	2.40*	2911
6. Junior and Senior High Schools.....	1.79	.78	5.17	2.26	6.66	1.45	2939
7. Emergency Ambulance Service.....	27.54	15.77***	2.48	1.42	2.53	.72	3106
8. Health Care Facilities/Services.....	8.62	4.17*	26.35	12.75***	2.59	.63	3091
9. Availability of Doctors.....	40.78	17.02***	94.51	39.44***	14.03	2.93*	3128
10. Houses/Apartments to Rent.....	23.64	10.27***	87.24	37.90***	14.53	3.16*	3082
11. Low Cost Housing.....	2.30	.99	1.56	.67	1.78	.38	3053
12. Teenage Drug Abuse.....	.15	.09	10.91	6.77**	3.03	.94	3003
13. Water Pollution.....	4.46	1.94	76.28	33.14***	9.95	2.16	3109
14. Crime.....	6.16	3.85*	45.54	28.48***	16.52	5.17***	3091
15. Police-Community Relations.....	1.21	.65	.35	.19	2.64	.71	3054
16. Youth Recreation Opportunities.....	23.07	9.71***	42.78	18.00***	11.40	2.40*	3038
17. Cultural Opportunities.....	29.65	12.44***	174.04	73.01***	17.98	3.77**	3090
18. Recreation Opportunities for Adults.....	44.28	20.11***	77.92	35.39***	27.39	6.22***	3103
19. Recreation for Senior Citizens.....	36.87	15.37***	85.69	38.03***	21.40	4.75**	3077
20. Job Opportunities for Youth.....	5.27	3.03*	33.27	19.10***	2.28	.65	3021
21. Shopping Facilities.....	72.69	42.38***	186.73	108.87***	31.53	9.19***	3119
22. Attention to Complaints about Government.....	.72	.35	2.09	1.01	2.26	.55	2989
23. Citizen Participation.....	.81	.39	2.00	.97	5.33	1.29	3016

*P < .05
**P < .01
***P < .001

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Table 4. Rankings of the Magnitude of the Effects Due to Size of Place, Ecological Milieu, and Two-Way Interaction for 23 Community Attributes.

	Size of Place (A)	Ecological Milieu (B)	Interaction (AB)
1. Upkeep of Roads and Streets.....	2	1	ns
2. Police Protection.....	1	ns	2
3. Fire Protection.....	1	2	ns
4. Public Library System.....	2	1	ns
5. Elementary School.....	ns	1	2
6. Junior and Senior High Schools.....	ns	ns	ns
7. Emergency Ambulance Service.....	1	ns	ns
8. Health Care Facilities/Services.....	2	1	ns
9. Availability of Doctors.....	2	1	3
10. Houses/Apartments to Rent.....	2	1	3
11. Low Cost Housing.....	ns	ns	ns
12. Teenage Drug Abuse.....	ns	1	ns
13. Water Pollution.....	ns	1	ns
14. Crime.....	3	1	2
15. Police-Community Relations.....	ns	ns	ns
*16. Youth Recreation Opportunities.....	2	1	ns
17. Cultural Opportunities.....	2	1	3
18. Recreation Opportunities for Adults.....	2	1	3
19. Recreation for Senior Citizens.....	2	1	3
20. Job Opportunities for Youth.....	2	1	ns
21. Shopping Facilities.....	2	1	3
22. Attention to Complaints about Government.....	ns	ns	ns
23. Citizen Participation.....	ns	ns	ns

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- Beaulieu, Lionel J. and Peter F. Korschning (editors)
1979 Focus on Florida: The Citizens' Viewpoint. Gainesville, Florida:
Center for Community and Rural Development - IFAS, University of
Florida, Special Series 1.
- Blackwood, Larry G. and Edwin H. Carpenter
1978 "The importance of anti-urbanism in determining residential preferences and migration patterns." Rural Sociology 43 (Spring): 31-47.
- Blake, Brian F., Karl Weigl, and Robert Perloff
1977 "Perceptions of the ideal community." Journal of Applied Psychology 60 (2):612-15.
- Campbell, Angus, Philip E. Converse, and Willard Rodgers
1976 The Quality of American Life. New York: Russell Sage Foundation.
- Christenson, James A.
1974 Through Our Eyes: Community Preferences and Population Distribution. Raleigh: North Carolina Agricultural Extension Service.
- 1976 North Carolina Today and Tomorrow: People's Views on Community Services. Raleigh: North Carolina Agricultural Extension Service.
- 1976 "Quality of community services: a macro-unidimensional approach with experiential data." Rural Sociology 41 (Winter):509-25.
- Dillman, Don A.
1978 Mail and Telephone Surveys: The Total Design Method. New York: John Wiley and Sons.
- Dillman, Don A., and Russell P. Dobash
1972 Preferences for Community Living and their Implications for Population Redistribution. Pullman: Washington Agricultural Experiment Station, Bulletin 764 (November).
- Dillman, Don A. and Kenneth R. Tremblay, Jr.
1977 "The quality of life in rural America." The Annals of the American Academy 429 (January):115-29.
- Dillman, Don A., Annabel Kirschner-Cook, and Richard Fernandez
n.d. Community Satisfaction and Population Redistribution Policies.
Pullman: Washington State Agricultural Research Center.
- Elgin, D., T. Thomas, and S. Cox
1974 City Size and the Quality of Life. Palo Alto, California: Stanford Research Institute.

- Hines, Fred K., David L. Brown and John M. Zimmer
1975 Social and Economic Characteristics of the Population in Metro
and Nonmetro Counties, 1970. Washington, D.C.: USDA, Agricul-
tureal Economic Report No. 272.
- Iverson, Gudmund R. and Helmut Norpoth
1976 Analysis of Variance. Beverly Hills: Sage Publications.
- Johnson, Ronald L. and Edward Knop
1970 "Rural-urban differentials in community satisfaction." Rural
Sociology 35 (December):544-48.
- Kim, Jae-On and Frank J. Kohout
1975 "Analysis of Variance and Covariance"; in Nie, et al (eds.),
Statistical Package for the Social Sciences, 2nd edition. New
York: McGraw-Hill Book Company;398-433.
- Marans, Robert W. and Willard Rodgers
1975 "Toward an understanding of community satisfaction"; in Amos H.
Hawley and Vincent P. Rock (eds.), Metropolitan American in Con-
temporary Perspective. New York: Halsted Press Division, John
Wiley and Sons:299-352.
- Miller, Michael K. and Kelly W. Crader
1979 "Rural-urban differences in two dimensions of community satis-
faction." Rural Sociology 44 (Fall):489-504.
- Rojek, Dean G., Frank Clemente and Gene F. Summers
1975 "Community satisfaction: a study of contentment with services."
Rural Sociology 40 (Summer):177-92.
- Warner, Paul D. and Rabel J. Burdge
1979 "Perceived adequacy of community services: a metro-nonmetro com-
parison." Rural Sociology 44 (Summer):392-400.
- Williams, Anne S., Russell C. Youmens, and Donald M. Sorenson
1975 Providing Rural Public Services. Corvallis: Oregon State Uni-
versity Agricultural Experiment Station.